

Remarks

Claims 1-6 are currently pending. In view of the amendments above and the following remarks, Applicant respectfully requests reconsideration by the Examiner, and advancement of the application to allowance.

35 U.S.C. § 102

The Examiner rejected claim 7 as being anticipated by Dobinson et al. (US 4,540,769). Applicants have cancelled claim 7 rendering this rejection moot.

35 U.S.C. § 103

The Examiner rejected claims 1-7 under 35 U.S.C. § 103(a) as being unpatentable over Dobinson et al. in view of Christian Reichardt (Solvents and Solvent Effect in Organic Chemistry). Applicants traverse this rejection for the following reasons.

Claim 1 is generally directed to a process for preparing aromatic N-glycidylamines using a divalent or polyvalent metal salt of nitric acid as a catalyst, which has been dissolved in propylene carbonate.

In comparison, Dobinson et al.'s process uses a divalent or polyvalent metal salt of nitric or perchloric acid which has been dissolved in either 2-methoxyethanol, isodecanol, ethylene glycol, diethylene glycol, N-methylpyrrolidone, gamma butyrolactone, benzyl alcohol, dibutyl phthalate, butane-1,4-diol, ethyl methyl ketone, benzene or toluene. Dobinson et al. does not disclose or suggest dissolving the catalyst in propylene carbonate.

The Examiner has added Reichardt for the purpose of teaching organic solvents, such as 1,2-ethanediol, diethylene glycol, 2-methoxyethanol and propylene carbonate. The Examiner asserts one would have selected propylene carbonate as an alternative to

the solvents listed in Dobinson et al. in order to conduct the process in a solvent having a high dielectric constant.

Applicants respectfully submit the Examiner is impermissibly using hindsight to arrive at Applicants presently claimed invention. In particular, Dobinson et al. teach 12 different organic solvents, each having a dielectric constant ranging between about 2 - 65. The specific organic solvents cited by the Examiner, 1,2-ethanediol, diethylene glycol, 2-methoxyethanol and propylene carbonate, have dielectric constants of about 38, 32, 17 and 65 respectively. Reichardt teaches 100 organic solvents having dielectric constants ranging between about 2 - 190. Dobinson et al. provides no teaching or suggestion that its process could or would be improved by choosing organic solvents having high dielectric constants. In fact, using the Examiner's reasoning, one skilled in the art would have looked to the use of organic solvents having low dielectric constants since Dobinson et al. demonstrated dissolving the catalyst in isodecanol (dielectric constant of 6) instead of 2-methoxyethanol (dielectric constant of 16.9) produced a product having an epoxide content that was 97.1% of that which is theoretical, which was the highest of all exemplified (*see Example 24 in Dobinson et al.*).

Nevertheless, Applicants have surprisingly found that when a divalent or polyvalent metal salt of nitric acid is dissolved in propylene carbonate in its claimed process for preparing aromatic N-glycidylamines, the reaction not only takes place more rapidly, but also produces fewer byproducts (*see [0004] of the present application*). Applicants further demonstrated this surprising result in Example 3 and Table 1 (*see paragraphs [0016]-[0018] of the present application*) where the catalytic activity of lanthanum nitrate dissolved in various organic solvents was compared. The organic

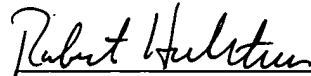
solvents included 3 (toluene, 2-methoxyethanol and gamma butyrolactone) taught in Dobinson et al. as well as ethylene carbonate and propylene carbonate. The results demonstrated that the use of propylene carbonate significantly improved both conversion and selectivity. This unexpected result is neither taught nor suggested in Dobinson et al. nor Reichardt, alone or in combination. Accordingly, Applicants respectfully request the rejection based on these publications be withdrawn.

Conclusion

In view of the foregoing amendments and remarks, Applicants respectfully submit that the application is now in condition for allowance, and respectfully requests issuance of a Notice of Allowance directed towards the pending claims. The Commissioner of Patents is hereby authorized to deduct any fee due in connection with the filing of this document from Huntsman Corporation Deposit Account No. 08-3442.

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Respectfully Submitted,



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